TOWN OF FORT MILL, SOUTH CAROLINA

NPDES PHASE II
STORMWATER MANAGEMENT PROGRAM

FORT MILL

PREPARED BY
STORMWATER DEPARTMENT
TOWN OF FORT MILL, SOUTH CAROLINA

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SECTION 1 INTRODUCTION

1.1 Overview

This document is the Town of Fort Mill's Stormwater Management Program (SWMP). It is being submitted as a follow up to the Town's Notice of Intent to comply with the terms of the "State of South Carolina NPDES General Permit for Stormwater Discharges from Regulated Small Municipal Separate Storm Sewer Systems (SMS4). The SWMP is subject to revision and evolving over time as Best Management Practices are monitored and adapted to accommodate more effective measures.

As of August 2007, the Town of Fort Mill was listed as a Small Municipal Separate Storm Sewer System (SMS4) under the National Pollutant Discharge Elimination System (NPDES) Phase II General Permit (2006) administered by the South Carolina Department of Health and Environmental Control (SCDHEC).

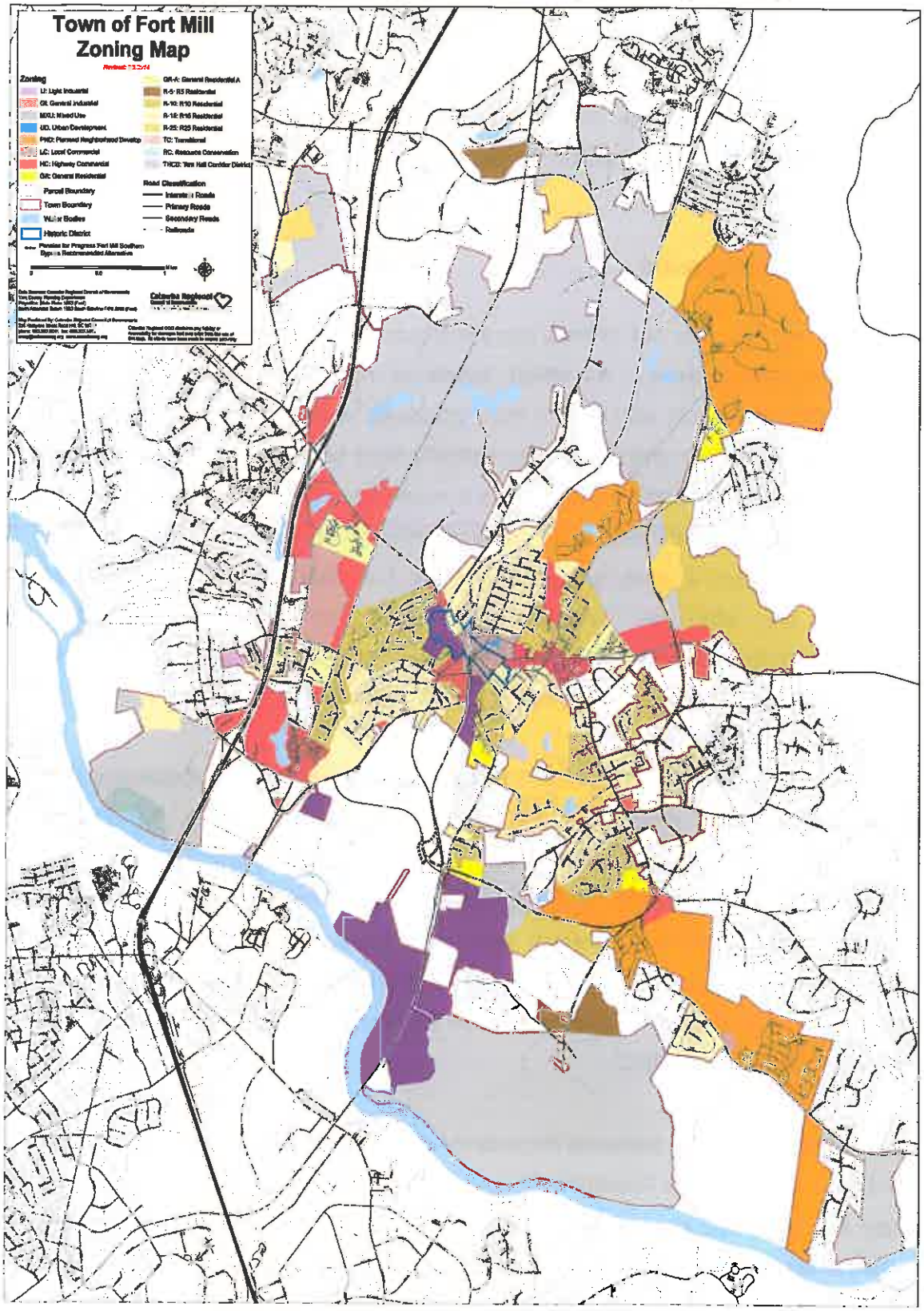
A SWMP was originally developed in conjunction with Town's first NPDES permit requirements which took effect in 2006. The SWMP has since been updated to correspond with permit language reflected in the Town's second permit which took effect in January 2014.

This SWMP is intended to outline and direct the Town's stormwater related priorities and activities for the years 2014 through 2018. This comprehensive five year plan is designed to enhance and protect stormwater quality in the Town of Fort Mill. The SWMP incorporates measurable goals, control measures and public programs to minimize the amount of pollutants discharged through the stormwater system.

1.2 Community Setting

The Town of Fort Mill is located in York County, approximately eighteen (18) miles south of downTown Charlotte, North Carolina and five (5) miles north of the City of Rock Hill, South Carolina (approximately 35°00'15" Latitude and 80°56'37" Longitude). The Town limits include an area encompassing approximately 16 square miles with a population of approximately 11,387 persons (2012 US Census estimate). Based on this data, the population of the Town has increased by approximately 5 % over the last two (2) year period (2010 Census numbers). Refer to Figure 1-1 for a location map delineating the Town limits. The economy of the Town of

Figure 1-1 Town of Fort Mill Municipal Limit (2/2014)



Fort Mill and its surrounding areas are transitioning from a climate heavily geared towards textile manufacturing (i.e., Springs Industries) to a mix of light industrial and residential. This transition appears to have occurred as the result of the Town's close proximity to Interstate 77 and Charlotte, North Carolina. Elevations range from 490 feet above sea level near the Catawba River to 670 feet above sea level. Additional general information regarding the Town of Fort Mill required in conjunction with Individual Phase II Permitting Requirements are included in the Appendix of this report.

1.3 Regulatory Background

Stormwater runoff that does not infiltrate into the ground flows into water bodies, such as lakes, streams, rivers, and oceans. As runoff travels to receiving waters, naturally vegetated depressions slow the water and filter it from pollutants and sediments. However, in urban settings, natural vegetation and topography typically have been altered, graded, or paved and stormwater is diverted in storm drainpipes. As a result, flows typically increase in concentration and velocity and pick up sediments and pollutants from land surfaces at an increased rate. This "urban runoff" can carry a wide range of pollutants, (i.e., nutrients, trash, debris, sediments, heavy metals, etc.) which can have a negative impact on water bodies and the various organisms that inhabit the water. Because urban runoff does not originate from a distinct "point" source, it is also often referred to as non-point source pollution.

Urban point source pollution is addressed through the National Pollution Discharge Elimination System (NPDES) permit program of the Clean Water Act. In 1990, the Environmental Protection Agency (EPA) established Phase I of the NPDES Stormwater Program. This program requires NPDES permits for stormwater discharges from medium and large municipal storm sewer systems (MS4s), generally serving populations greater than 100,000, specific industrial activities, and construction activities disturbing five (5) or more acres of land. In South Carolina, the NPDES program is administered by the South Carolina Department of Health and Environmental Control (SCDHEC).

In October of 1999, the Environmental Protection Agency (EPA) published the final version of its NPDES Phase II Stormwater Permitting Regulations. This new regulation expanded the Phase I Program to include operators of municipalities within designated urbanized areas, as well as designated small municipalities outside of urbanized areas (generally those with a population of at least 10,000 and/or a population density of at least 1,000 person per square mile) which are

referred to as Small Municipal Storm Sewer Systems (Small MS4). The expanded program also includes increased permitting requirements for construction sites that disturb more than 1 acre. Based on the 2000 Census Data, the Town of Fort Mill was identified as a "Regulated Small MS4" and as such was required to apply for coverage under an NPDES permit for discharges from its storm sewer system.

The EPA has established three (3) permitting options available to small MS4's: 1) coverage under a general permit; 2) participating in the implementation of an existing Phase I MS4's stormwater program as a co-permittee; or 3) applying for an individual permit. Both SCDHEC personnel and EPA guidance documents *Stormwater Phase II Compliance Assistance Guide (EPA 833-R-00-002)* encouraged Small MS4 operators to obtain coverage under a General Permit. However, the United States Court of Appeals for the Ninth Circuit recently ruled against EPA regarding the legality of the Phase II General Permit option. As such, SCDHEC notified all small MS4's to file an application for an individual NPDES permit as given in Section 122.33(b)(2) of SC Regulation 61-9.

This first general permit (SC0000000) for Small MS4s was issued on March 1, 2006. In this final order, the Administrative Law Judge required Small MS4s' owners, or operators, to develop, implement and enforce a program to reduce pollutants in any stormwater runoff to their regulated Small MS4s' from construction activities and from new development and redevelopment that discharge into the Small MS4s within eighteen months of the effective date of the permit. The first permit has now expired. The second permit (SCR030000) was effective January 1, 2014, expiring December 31, 2018. The Town's program will need to comply with all requirements in the second permit on or before December 1st, 2018.

1.4 Program Goals

To comply with the Phase II Regulations and the General Permit requirements, the Town's Storm Water Management Program (SWMP) has been developed to provide for an efficient, adequately funded program to protect water quality. The plan will assist, direct, and support Town staff with implementing Best Management Practices (BMPs) to protect storm water quality.

The plan is based on reducing the discharge of pollutants from the Town to the Maximum Extent Practicable (MEP) through the selection and implementation of following six (6) Minimum Control Measures (MCMs):

- Public education and outreach on stormwater impacts;
- Public involvement/participation;
- Illicit discharge detection and elimination;
- Construction site storm water runoff control;
- Post-construction stormwater management in new development and redevelopment; and
- Pollution prevention/good housekeeping for municipal operations.

Each of these MCMs, or program elements, is to be implemented by applying one or more Best Management Practices (BMPs), establishing measurable goals, and setting timetables for implementation. Measures of BMP effectiveness may begin once each BMP is implemented. An Annual Report prepared by the Stormwater Department shall include findings which evaluate each BMP's effectiveness. The report shall review all aspects of current State and Federal Regulations against those applied to the SWMP, and outline necessary alterations to the SWMP.

By the end of the five-year permit term, the Town anticipates having a comprehensive, practical, and effective SWMP that may be utilized to begin the next five-year term under NPDES permit regulations.

SECTION 2 PROGRAM OVERVIEW

The Town of Fort Mill is committed to protecting water quality through the reduction of pollutants in the discharge from their storm water system. The purpose of this SWMP is to reduce pollutants from the Town to the Maximum Extent possible (MEP) through the selection and implementation of Best Management Practices (BMPs). This program outlines the procedures, policies and BMPs that have been developed by the Town of Fort Mill to comply with the Phase II Storm Water Program Requirements.

2.1 Staffing

Originally Town administration reviewed current staffing and decided to implement the SWMP with existing staff and outside consultants. Once the Town determined the extent it would be relying on outside consultants, the Town chose to hire an engineering director to assume responsibility for:

- Construction site stormwater runoff control;
- Post-construction stormwater management in new development and redevelopment; and

The engineering director is a certified Stormwater Plan Reviewer (#91) and a certified Erosion Prevention and Sediment Control Inspector (#2419). The Town reorganized its staffing in 2009 creating the position of project manager. One of the project manager's responsibilities included being the Town's inspector of water, sewer and stormwater system installations as well as stormwater construction site inspections. In 2013, the Town management recognized the increasing complexity of the new permit and the effect of growth impacts on water and sewer systems. Since then the Town has hired an assistant engineering director and assigned the stormwater manager's title and responsibilities. The Town will continue to plan to leverage the experience and qualifications of the Town's existing staff, matching the needs of the individual plan requirements and overall tasks assigned accordingly (i.e., illicit connection detection integrated into Utility Department, street cleaning and leaf collection into Public Works and stormwater site inspections and erosion control integrated into Stormwater Department, etc.). Additional training will allow the Town to coordinate and build upon existing efforts and services currently provided to residents while providing a cost effective approach for implementing the SWMP.

2.2 Oversight Committee

To help assist in the development of the SWMP and the implementation of the plans control policies and procedures, the Town has established a Stormwater Advisory Committee. The oversight committee will be responsible for the general development of the program as well as conducting evaluations of the program and reporting to the governing and permitting authorities. Initially, the committee was comprised of staff and outside engineering consultants. Currently the Town has requested five community volunteers to be the members of this committee. The individuals represent the diversity of the Town's general population. The committee is currently made up of a Sierra Club member, curriculum coordinator for School District Four, a civil engineer, and two open positions.

2.3 Fiscal Resources

Depending upon the general performance objectives of the SWMP, the budgetary requirements of the program will vary. The cost to administer and implement the plan were somewhat lower until the later years of the first permit period (i.e., 5-year period) when the plan will be fully operational. As such, for the first term of the permit, the SWMP was funded through General Funds. As program requirements (i.e., staffing, services, etc.) and their associated costs increase, the Town is establishing a stormwater utility to finance the SWMP during the term of the second permit and to report its spending annually to SCDHEC.

2.4 MINIMUM CONTROL MEASURES AND BEST MANAGEMENT PRACTICES

2.4.1 Minimum Control Measures (MCMs)

The State General Permit requires that a SWMP be developed addressing the following six (6) program areas, or so called Minimum Control Measures (MCMs):

- Public education and outreach on stormwater impacts;
- Public involvement/participation;
- Illicit discharge detection and elimination;
- Construction site stormwater runoff control;
- Post-construction stormwater management in new development and redevelopment; and
- Pollution prevention/good housekeeping for municipal operations.

Each of these MCMs, or program elements, is to be implemented by applying one or more Best Management Practices (BMPs), establishing measurable goals, and setting timetables for implementation.

2.4.2 Best Management Practices (BMPs)

Best Management Practices (BMPs) are designed to protect water quality, reduce the discharge of pollutants to the Minimum Extent Practicable (MEP), and satisfy the State and Federal permit requirements. The BMPs (source and treatment) are common sense methods for controlling, preventing, reducing, or removing pollutants in urban runoff. Source control BMPs are intended to prevent or minimize the introduction of pollutants into runoff and treatment BMPs are designed to remove the pollutants from stormwater runoff. The Town has selected a number of source BMPs that reflect local conditions and specific water quality issues. The selected BMPs when implemented should form a comprehensive framework that will reduce stormwater pollution to the MEP.

To help track the effectiveness of each BMP, to gather data for submittal to SCDHEC in an Annual Report (Section 122.34(g)(3) of SC Regulation 61-9), and to help evaluate the overall progress of the SWMP, the Town has established measurable goals (i.e., quantifiable target) for each BMP. These goals include an implementation schedule for completion of each measure. Each schedule is based on the full implementation of the respective BMP in a five-year period (i.e., full permit period).

The following sections outline each MCM and their associated BMPs by providing a description of the specific activities, measurable goals, and implementation timetables. In addition, a summary of all MCMs and their associated BMPs are provided in table form at the end of each section.

SECTION 3 MCM-1: PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

3.1 Summary of Permit Requirements

1. *Identify and analyze the pollutant of concern (POC) within the municipality's defined watershed.*
2. *Initiate a planning process that defines the goals and objectives of the program as they relate to at least three high priority community issues with potential to decrease the POC's effect on water quality.*
3. *Develop and distribute appropriate education campaign materials as needed to convey any messaging created in accordance with program goals and objectives and based on knowledge of the target audience(s).*

3.2 Program Description

The goal of the Public Education and Outreach element is to generate awareness of stormwater pollution prevention by educating people about the storm drain system and its relationship to the health of local waterways. It is through educational awareness that the Town aims to change behavior patterns and establish active participation in water pollution prevention.

3.2.1 Pollutant of Concern

Stormwater runoff from impervious surfaces carries large amounts of various pollutants to the surface waters of the United States. These pollutants include nutrients, silt/sediment, pathogens, oil/grease, metals, debris and litter. Of particular concern to the water bodies in the Fort Mill MS4 area, are nutrients, sediment and pathogens.

Nutrients (Phosphorus and Nitrogen)

Phosphorus and nitrogen are the nutrients of greatest concern because they promote weed and algae growth in lakes and streams. When deposited in excessive amounts into water bodies, they can cause a condition known as *eutrophication. Eutrophication*, or an excess of nutrients, causes vast ecological imbalances, including algae blooms. Excessive weed growth clogs waterways and blocks sunlight. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in

water with low dissolved oxygen levels. Some sources of nutrients are fertilizer, excrement and detergents.

The primary sources of nitrogen and phosphorus in Fort Mill's stormwater are wild and domestic animal wastes and excessive or improper use of commercial fertilizers.

Silt and Sediment

Large amounts of silt and sediment, when dislodged and swept by stormwater into water bodies, can disrupt ecosystems in a number of ways. Stormwater runoff that contains sediment can deposit harmful amounts of silt in sensitive areas such as wetlands, wildlife preserves, and stream and lake bottoms harming habitat needed by aquatic insects and plants. Sediment blocks sunlight needed by aquatic plants to grow. Sediments can carry toxic chemicals that cause the oxygen in water to be used up.

A particular cause is sediment discharged from land areas disturbed by construction activities including but not limited to subdivisions, shopping centers and road projects. Excessive stream velocities influenced by impervious areas can erode stream banks and beds adding to suspended solids. Soil erosion from lawns, hillsides, and gardening/landscaping activities is another source of sediment.

Pathogens (Bacteria, Viruses)

Bacteria and viruses include infectious agents and disease producing organisms normally associated with human and animal wastes, leakage from sewers and seepage from septic tanks. These organisms can cause disease in humans and animals when present in drinking water and contact recreation water bodies. Biological contaminants come from litter, organic matter and animal waste.

The major contributor of pathogens into the Town's stormwater is wild and domestic animal waste that is carried by stormwater into our storm sewers, lakes and streams. Pathogens from wild animals are somewhat beyond local governments' ability to control. The Town addresses pathogens from domestic animals by maintaining pet waste stations in all public parks and through public education. With regard to reducing pathogens from human sources, the Town's sewer department is implementing a Sanitary Sewer Overflow program to improve the area's

sanitary collection system in addition to implementing BMPs to address illicit discharges. The Town will implement a water quality monitoring program.

3.2.2 Target Audiences and Methods to Reach the Audiences

The public education and outreach program targets three main audiences:

- General public
- Construction site operators
- Restaurant/Commercial property owners/managers

Each group has specific activities that have different contributions to stormwater quality degradation. Primary pollutants of concern which the general public residents may reduce are nutrients and pathogens. These pollutants can largely be attributed to lawn care and pet waste. Construction site operator's education, in conjunction with both construction programs, will target sediment and other pollutants associated with construction activity. Finally, in conjunction with the Illicit Discharge Detection and Elimination Program, restaurants/commercial property owners are educated about pollutants common to their everyday operations.

The following items target education for the above mentioned audiences. Web pages, educational pamphlets, utility stuffers, TV, facebook, and printed advertising will be used to educate the general public about non-point source pollution. Contractors receive information about stormwater pollution prevention through the contractor education program and educational pamphlets, and municipal employees receive training in coordination with Section 6 (MCM-4: Construction Site Stormwater Runoff Control) of this program.

3.3 BMPs

The program consists of five BMPs: brochure education, stormwater website, community parks, coordination with news media, and education programs.

3.3.1 BMP 1-1: Brochure Education

IMPLEMENTATION DETAILS

The Town will produce and distribute various brochures include, but not limited to, the following:

- Be Part of the Solution to Stormwater Pollution
- Restaurant/Commercial Guide

- Construction Site Erosion and Sedimentation Control
- Landscape Maintenance Guide

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Design and distribute the brochures mentioned above for public distribution. (Year 1 and as needed)
2. Keep track of the number of brochures distributed each year and to which group. (Years 1-5)

3.3.2 BMP 1-2: Stormwater Website

IMPLEMENTATION DETAILS

The Town will create a website with details of the Town's stormwater management program for the public. All public documents relating to stormwater will be made available on the website, such as the SWMP. Contact information for all applicable Town staff including the Stormwater Hotline will be included on the website, enabling the public an opportunity to communicate their concerns, questions, and viewpoints regarding the Town's SWMP and associated stormwater management policies. The Town will maintain the website through their Stormwater Department and update it as necessary.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Create Town stormwater website specifically geared towards providing stormwater information to the general public. It will include stormwater program information, contact information, reference documents and hyperlinks to other resources, and the ability to obtain public comments and opinions. (Year 1-2)
2. Keep track of the number of public comments received and document all Town responses. (Years 1-5)
3. Update the website as needed. Review content for accuracy and applicability.(Years3-5)

3.3.3 BMP 1-3: Community Parks

IMPLEMENTATION DETAILS

The Town will utilize the Town park system as a venue for public outreach by distributing or posting information regarding stormwater protection. The Town will provide plastic bags for pet waste collection at parks. Pet waste that is improperly disposed of can result in the transfer of associated pathogens to the Town MS4 via landscaping irrigation and stormwater runoff.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Provide pet waste bags at Town Parks and keep track of bags supplied. (Years 2-5)
2. Display stormwater related general educational materials and information about specific BMPs installed by the Town at kiosks in Town Parks. (Years 3-5)

3.3.4 BMP 1-4: Coordination with News Media

IMPLEMENTATION DETAILS

The Town will coordinate with local newspapers, television and internet to enhance the effectiveness of the stormwater program.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Produce a video to educate the public about the impacts of stormwater pollution, the difference between stormwater and sanitary sewer collection systems, and the steps they can take to protect our waterways. (Year 2)
2. Publish the video on the Town's website, Facebook and also broadcast on the local TV channel periodically. (Years 2-5)
3. Draft and publish articles regarding stormwater pollution prevention. (Years 2-5)

3.3.5 BMP 1-5: Education Programs

IMPLEMENTATION DETAILS

The Town will continue to develop and implement education programs to discuss the impact of stormwater discharges to the environment and identify measures that individuals can take to help reduce common pollutant sources in the community.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Continue to work with the School District to implement the stormwater curriculums and provide financial support for curriculum realignment according to the State standards. (Years 1-5)
2. Develop and implement a contractor education program to provide information regarding impacts of stormwater pollution and sediment and erosion control measures on a construction site. (Years 2-5)

3. Develop and implement a developer/engineer education program to provide information regarding impacts of stormwater pollution and the Land Disturbance Permit application process. (Years 2-5)
4. Develop and implement an annual municipal employees training program and coordinate with MCM 6 – Pollution Prevention/ Good Housekeeping for Municipal Operations. (Years 2-5)

SECTION 4 MCM-2: PUBLIC INVOLVEMENT/PARTICIPATION

4.1 Summary of Permit Requirements

1. *Involve the public in the planning and implementation of activities related to the development and implementation of the SWMP.*
2. *Provide a forum and a structure by which to encourage, or to allow, the public to participate.*
3. *Create opportunities for citizens to participate in the implementation of stormwater controls (e.g., stream clean-ups, storm drain stenciling, volunteer monitoring, and educational activities).*
4. *Ensure the public can easily find information about the permittee's SWMP.*

4.2 Program Description

The goal of the Public Involvement and Participation program control measure is to raise public awareness about stormwater pollution and protection. Ultimately, this should lead to the reduction of discharge of pollutants in the stormwater system. The Town believes an active and involved community is crucial to the success of a stormwater management program.

To help secure support for the SWMP from elected officials, citizens, and business groups, this aspect of the Town's plan will involve citizens from the community in both the development and implementation of the SWMP. Volunteer groups are essential to a successful non-point source management program as the sources of issues are often the very things that the general population can affect. Volunteers provide much needed assistance with labor and become more educated and engaged. The Town uses volunteers to help with the Adopt-A-Stream and Storm Drain Stenciling programs.

4.3 BMPs

The program consists of three BMPs: public development process, storm drain stenciling and Adopt-A-Stream program.

4.3.1 BMP 2-1: Public Development Process

IMPLEMENTATION DETAILS

The development and implementation of the SWMP shall be an open process available for public review and comment. The Town will create opportunities for the public to participate in the decision–making processes involving the development, implementation and update of the Town's NPDES Phase II SWMP. The Town will also follow all state and local requirements regarding public notices, public meetings and the availability of all documents of public record..

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Hold public meetings to allow citizens to discuss various viewpoints and provide input concerning appropriate stormwater management policies and BMPs. Post public meeting notices prior to public meetings in compliance to current state and local regulations. (Years 1-5)
2. Conduct periodic meetings with the citizen's advisory committee members. (Years 1-5)
3. Develop a list of interested parties based on the attendance of these meetings and from individual inquiries. This list will be used to keep those interested updated on SWMP developments and activities. (Years 1-5)
4. Keep track of meeting attendance and comments to aid in gaging public interest and effectiveness of this BMP. (Years 1-5)
5. Make available stormwater documents for public comment and review. This includes, but is not limited to, agendas, minutes, and the SWMP. The most current SWMP will be posted on the Town's stormwater website. (Years 1-5)

4.3.2 BMP 2-2: Storm Drain Stenciling Program

IMPLEMENTATION DETAILS

The goal of the storm drain stenciling program is to remind the general public that the storm drains connect to local water bodies directly, stormwater is not treated, and never to dispose of waste through storm drains. Commonly stenciled messages include: "No Dumping. Drains to waterways", "No waste Here.".

The Town will organize stenciling of all existing storm drain inlets in the older part of the Town through collaboration with either Town staff or volunteer groups in cooperation with staff.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Update a map of all the storm drains in the Town's limits. (Year 2)

2. Identify and prioritize the storm drain inlets within the Town to be stenciled that will have the most impact on the local communities. (Year 2)
3. Work with the school district to hold an art contest for the storm drain stencils design. (Year 2)
4. Develop a schedule and plan to address storm drain inlets within the Town. (Year 2)
5. Implement stenciling program including the participation of the public and local service organizations. (Years 2-5)
6. Keep track of the storm drain inlets stenciled and update the schedule and plan as needed. (Years 2-5)

4.3.3 BMP 2-3: Adopt-A-Stream Program

IMPLEMENTATION DETAILS

The Town has been implementing an "Adopt-A-Stream" program for years. The goal of this program is to minimize the amount of trash and possible pollutants that can enter the Town's waterways, avoid reduction of waterways capacity that can cause flooding, and increase public ownership in Town streams through participation.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Identify creeks within the Town that are at risk or most in need of clean-up.
2. Keep track of the amount and type of trash collected to help identify common pollutants and in the future minimize them. (Years 1-5)
3. Develop and distribute informational brochure which discusses the Town's "Adopt-A-Stream" Program. (Years 1-5)
4. Advertise/promote the program through cable television, newspaper, internet, schools, or mailings to the community and environmental groups. (Years 1-5)
5. Investigate on the possibility of future stream restoration efforts. (Year 3)

SECTION 5 MCM-3: ILLICIT DISCHARGE DETECTION AND ELIMINATION

5.1 Summary of Permit Requirements

1. *Implement a program to detect, investigate and eliminate non-stormwater discharges including illegal dumping into its system.*
2. *Procure all necessary legal authority to do this.*
3. *Develop (if not already completed) a storm sewer system map showing the location of all outfalls, and names and location of all waters of the United States that receive discharges from those outfalls.*
4. *Identify priority areas (i.e. problem areas) for more detailed screening of their system based on higher likelihood of illicit connections (e.g. areas with older sanitary sewer lines), or by conducting ambient sampling to locate impacted reaches. This priority area list must be updated annually to reflect changing priorities and be available for review by the permitting authority.*
5. *Implement, or continue to revise as applicable, a written dry weather field screening and analytical monitoring procedures to detect and eliminate illicit discharges to the MS4.*
6. *Assess the effectiveness of the Field Screening component of the program in the third Annual Report to determine if the level of effort is adequate in attaining the effective prohibition of non-stormwater and update as necessary.*
7. *After becoming aware of the illicit discharge, initiate an investigation(s) to identify and locate the source of any continuous or intermittent non-stormwater discharge within a timeframe that is consistent with the procedures found in the SWMP.*
8. *Track all investigations to document at a minimum the date(s) the illicit discharge was observed; the results of the investigation; any follow-up of the investigation; and the date the investigation was closed.*
9. *Once the source of the illicit discharge has been determined, take corrective action to eliminate illicit discharges.*
10. *Promote, publicize, and facilitate a reporting mechanism for the public and staff to report illicit discharges and establish and implement citizen request response procedures.*

11. *Develop a written spill/dumping response procedure for responding to public notices of illicit discharges, the various responsible agencies and their contacts, and who would be involved in illicit discharge incidence response.*
12. *Conduct reactive inspections in response to complaints and follow-up inspections as needed to ensure that corrective measures have been implemented by the responsible party to achieve and maintain compliance.*
13. *Implement a training program for all appropriate municipal field staff, which, as part of their normal job responsibilities, may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the storm sewer system.*
14. *Keep track of all training and follow up training provided to address IDDE and to the staff trained in this MCM.*

5.2 Program Description

An illicit discharge is defined as any discharge to the MS4 that is not composed entirely of stormwater with the exception of those authorized in the NPDES MS4 permit. These non-stormwater discharges can occur due to illegal connections to the storm drain system from both residential and commercial establishments. As a result of these illicit connections, contaminated wastewater enters into stormwater without receiving treatment.

The Town has developed and fully implemented an Illicit Discharge Detection and Elimination Program. This program is designed to prevent contamination of ground and surface water by identifying and eliminating these illegal non-stormwater discharges.

5.3 BMPs

The program consists of seven BMPs: system mapping, ordinances prohibiting illicit discharges, a dry weather screening and filed investigation program, a citizen reporting hotline, a hazardous spill response plan, an illicit discharge detection and elimination program, a public education/public involvement program and a municipal employee training program.

5.3.1 BMP 3-1: System Mapping

IMPLEMENTATION DETAILS

The Town has created a storm sewer system map of all catch basins and outfalls within the Town boundary. The storm sewer map identifies all stormwater resources (outfall locations) located within the Town limits and the names and locations of all waters of the United States

that receive discharges from these outfalls. This map has been completed and was originally forwarded to SCDHEC in June of 2003. A copy of the Town's stormsewer map is included in the Appendix B of this report.

The Town's storm system map was developed using data gathered from engineers' project drawings, historic maps, an inventory study, and field verification. Realizing the importance of keeping the storm sewer database current, the Town created an administrative rule which requires stormwater as-built drawings to be submitted prior to project close-out for any project constructed within the Town Limits. Upon receipt of the as-built drawings, the data can be updated to reflect the changes made during the construction project. This map/inventory will be kept current each year as identified during the illicit discharge field screening.

The Town's current system map is in computer-aided design (CAD) format. A geographic information system (GIS) database will be created for the system map in order to better visualize possible sources of contamination or detail the area of a water body that an accidental spill may affect. The GIS database will assist in the monitoring, evaluation, and maintenance of the stormwater within the Town and therefore serves as a valuable tool to facilitate decision-makings.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Create a GIS database for the system map to maintain data efficiently and facilitate decision-making tasks. (Year 1)
2. Update the existing system map by using as-built drawings and field identified locations with a Global Positioning Satellite (GPS) device to ensure that all inlets, outlets, conduits, roadside ditches, culverts, etc. are field verified. This newly collected information will be incorporated into the GIS database. (Years 1-5)
3. Maintain a map of dry weather screening priority locations (i.e., priority outfalls). (Years 1-5)

5.3.2 BMP 3-2: Ordinances Prohibiting Illicit Discharges

IMPLEMENTATION DETAILS

The Town implements the Illicit Discharge Detection and Elimination program by establishing local legal authority through adoption of the Stormwater Management and Sediment Control Ordinance, which has been amended in June 2014 to reflect the new permit requirements. The

ordinance established prohibitions and/or restrictions on illicit discharges to the Town's MS4 and receiving waters. The ordinance also gives the Town staff the authority to perform inspections and enforce the provisions of the ordinance. A Notice of Violation may be written, after which corrective action must be taken within a certain period of time, unless the alleged violator requests an administrative review. If the violations remain uncorrected, then a fine may be levied. A land disturbance permit may be suspended or revoked under certain circumstances.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Amend the Ordinance when program goals or priorities change to ensure the Town has legal authority to fully implement this SWMP. (Years 1-5, as needed)

5.3.3 BMP 3-3: Dry-Weather Screening and Field Investigation

IMPLEMENTATION DETAILS

The Town has developed a written procedure on how to conduct dry weather screening and field investigation (See Appendix C). The Town staff conduct dry weather flow field survey by walking the outfalls to identify and monitor dry weather flows and other potential illicit discharges. Dry-weather screening is conducted during winter months when rainfall rates are low and vegetation is dormant. All dry weather screening activities should be conducted after 72-hours of continuous dry conditions following at least 0.1 – inch of rainfall. During the previous permit cycle, all outfalls inventories were field monitored and verified annually and outfalls having dry weather flows were sampled. Samples were tested for total suspended solids, total phosphorus, total nitrogen, pH, ammonia, total coliform, chloride, etc.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Conduct field screening of all outfalls within the priority areas and all known non-stormwater discharges to identify and eliminate existing improper physical connections. Document elimination of the illicit discharges.
2. Assess the effectiveness of the Field Screening component of the program to determine if the level of effort is adequate in attaining the effective prohibition of non-stormwater discharges into the MS4 and update as necessary.
3. Schedule removal of all illicit discharge sources detected and eliminate using procedures described in the Town's illicit discharge detection and elimination manual.

5.3.4 BMP 3-4: Citizen Reporting Hotline

IMPLEMENTATION DETAILS

The citizen reporting hotline was coordinated with the Public Education and Outreach program. Potential stormwater pollution can be reported to this number 24 hours a day, 7 days a week. Calls can be made anonymously. The hotline number can be found on the Town's website and education publications.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

5.3.5 BMP 3-5: Hazardous Spill Response Plan

IMPLEMENTATION DETAILS

Hazardous spill response is incorporated into the operation's manuals for the Town's Fire and Police authorities. The Fire and Police staff are trained in proper hazardous spill mitigation techniques.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Coordinate with the Fire and Police staff to keep track of hazardous spills that have the potential to impact stormwater and take necessary actions to minimize impacts on stormwater quality. (Years 1-5)

5.3.6 BMP 3-6: Illicit Discharge Education Programs

IMPLEMENTATION DETAILS

The Town's Sewer Department has developed and implemented a Fats, Oils, and Grease (FOG) Program. The FOG Program is designed to provide local restaurants and food service businesses within the sewer service area with the proper tools and knowledge to prevent sanitary sewer pipe blockages that can cause backups and sanitary sewer overflows.

The Town's Stormwater webpages also serves as sources of education. This part of the program is coordinated with MCM 1 – Public Education and Outreach on Stormwater Impacts. See Section 3 of this program for more information on this BMP.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Coordinate with the Sewer Department on the FOG program. (Years 1-5)
2. Post illicit discharge educational materials on the Town's stormwater website. (Year 1)

5.3.7 BMP 3-7: Municipal Employee Training Program

IMPLEMENTATION DETAILS

Informing public employees of hazards associated with illicit discharges and improper disposal of waste will be accomplished in conjunction with the Pollution Prevention and Good Housekeeping for Municipal Operations program (Section 8) along with the Public Education and Outreach program (Section 3). Training will be provided to all appropriate municipal field staff, which, as part of their normal job responsibilities, may come into contact with, or otherwise observe, an illicit discharge or illicit connection to the storm sewer system.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Train appropriate Town staff on illicit detection techniques. (Years 1-5)

SECTION 6 MCM-4: CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

6.1 Summary of Permit Requirements

1. *Continue developing, implementing, and enforcing a program to reduce pollutants in any stormwater runoff to their regulated SMS4 from construction activity.*
2. *Develop and implement an ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law. Describe the mechanism (ordinance or other) you will use to require erosion and sediment controls at construction sites and why you chose that mechanism.*
3. *Include a copy of the relevant sections of the existing ordinance or other regulatory mechanism along with the SWMP.*
4. *Implement site plan review procedures.*
5. *For construction projects that disturb 25 acres or more, require a written quantitative and qualitative assessment showing that the selected BMP will control the discharge of the pollutant, or pollutants, of concern from construction and post construction within a TMDL watershed, or to a water on the 303(d) List of Impaired Waters*
6. *Maintain an inventory of all active construction projects. The inventory must be continuously updated as new projects are permitted and projects are completed. The inventory must contain relevant contact information for each project (e.g., name, address, phone, etc.), the size of the project and area of disturbance.*
7. *Track the number of inspections for the inventoried construction sites throughout the reporting period to verify that the sites are inspected at the minimum frequencies required, and document inspections and enforcement activities for each site in the inventory.*
8. *Implement procedures for inspecting construction projects in accordance with the frequency specified in the permit.*
9. *At a minimum, inspections must occur following installation of initial BMPs, during active construction, and after final site stabilization.*
10. *Develop an Enforcement Response Plan (ERP).*

11. *Ensure that all staff, whose primary job duties are related to implementing the construction stormwater program, including permitting, plan review, construction site inspections, and enforcement, is trained to conduct these activities.*
12. *Construction Operator Education. Develop and implement an effective communication process with construction contractors to educate them on areas in which improvements are needed and to enforce any required actions.*
13. *Public Involvement. Implement procedures for receipt and consideration of information submitted by the public. Consider coordinating this requirement with the public participation program.*

6.2 Program Description

The Town developed and enforced a program to reduce pollutants in stormwater runoff from construction activities within the Town that result in a land disturbance greater than or equal to 5,000 square feet. Sediment runoff rates from construction sites are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. In addition to sediment, construction sites can contribute solid and sanitary wastes, nutrients, pesticides, oil and grease, construction chemicals and debris to our local water bodies. This aspect of the SWMP was developed to educate municipal employees, contractors and the general public regarding concerns caused by erosion from construction activities, regarding appropriate erosion control practices and outline the Town's erosion control requirements and policies. In addition, it is intended to provide the Town with the necessary authority to implement and enforce the program elements.

6.3 BMPs

This program consist of five BMPs: a construction stormwater pollution prevention ordinance, site plan reviews, a site inspection program, a staff training program, and a construction site operator and public involvement program.

6.3.1 BMP 4-1: Construction Stormwater Pollution Prevention Ordinance

IMPLEMENTATION DETAILS

The Stormwater Ordinance was drafted with the purpose being to protect, maintain, and enhance the environment of the Town and the short-term and long-term public health, safety, and general welfare of the Town by establishing requirements and procedures to control the potential adverse effects of increased stormwater runoff associated with both future

development and existing developed land. The Ordinance establishes the requirements for acquiring the Land Disturbance Permit and provides minimum standards for site grading and the control of stormwater runoff, both quantity and quality. It creates permitting, submittal and development design standards for erosion and sediment control, preservation of natural drainage systems, flood mitigation, site grading, and protection of property. Requirements for new developments to retain the first inch of stormwater on site are addressed. The enforcement actions associated with this ordinance include the following: Notice of Violations, Corrective Action, Stop Work Order, Civil and Criminal Penalties, Additional Legal Measures, and Permit Suspension and Revocation.

This ordinance has been implemented successfully for years. This ordinance was chosen because it provides the Town staff with authority to review the plans and inspect the constructions site to ensure compliance to the State and local law. A complete Ordinance revision is ready for full implementation.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Continue to enforce existing ordinances, including the issuance of fines that protect against stormwater runoff pollution; track all enforcement actions taken. (Years 1-5)
2. Revise existing Ordinance for approval by the Town Council as necessary. (Years 1-5)
3. Allow for public comment/input on draft Ordinance. (Years 1-5)

6.3.2 BMP 4-2: Plan Reviews

IMPLEMENTATION DETAILS

All construction site plans for projects disturbing over 5,000 square feet are reviewed to ensure that stormwater discharges will neither cause nor contribute to a violation of water quality standards. The Town created a "Quick Guide" to assist engineering consultants in performing the Land Disturbance Permit application with the Town.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Continue to implement the site plan review procedures for new development or redevelopment projects. (Years 1-5)

6.3.3 BMP 4-3: Inspections

IMPLEMENTATION DETAILS

An inventory of all active construction projects are maintained. The Stormwater Ordinance outlines the inspection and enforcement procedures at construction sites of more than 5,000 square feet. All active sites are inspected according to the frequency specified in the Town's 2014 MS4 permit. A checklist from SCDHEC is used by inspectors when checking pollution prevention controls at construction sites. The checklist can help ensure complete and consistent inspections.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Create a tracking mechanism for site inspections. (Year 2)
2. Conduct construction site inspection according to the schedule specified in the Town's MS4 permit. (Years 2-5)

6.3.4 BMP 4-4: Staff Training

IMPLEMENTATION DETAILS

All staff, whose primary job duties are related to implementing the construction stormwater program, including permitting, plan review, construction inspections and enforcement, is trained to conduct these activities.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Complete staff training and designate employee(s) who will be responsible for permitting, site plan review and inspection (annually or as needed). (Years 1-5)

6.3.5 BMP 4-5: Construction Site Operator Education and Public Involvement

IMPLEMENTATION DETAILS

A construction site operator education program will be developed and implemented to educate operators on areas in which improvements are needed and enforce any required actions. Information published on the Town's Stormwater webpages are available for comment from general public. This program is coordinated with the public participation and involvement program (Section 4).

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Develop and distribute a handout/brochure explaining the construction site permitting process, principles for controlling runoff from construction sites on good housekeeping practices for all construction sites.

2. Designate employee(s) to handle input and recording of public information/complaints. Develop a system of logging complaints and responses and methods of communicating back to the public, as issues are resolved.

SECTION 7 MCM-5: POST-CONSTRUCTION STORMWATER MANAGEMENT IN NEW DEVELOPMENT AND REDEVELOPMENT

7.1 Summary of Permit Requirements

1. *Establish, implement and enforce a requirement that owners or operators of new development and redeveloped sites discharging to the MS4, which disturb greater than or equal to one acre (including projects that disturb less than one acre that are part of a LCP), design, install, implement, and maintain stormwater control measures that approximate pre-development conditions to the MEP and protect water quality.*
2. *New Development Standards to be used can be either one, combination, or equivalent combination of design strategies, control measures, practices or provisions such as infiltration, evapotranspiration, rain harvesting, and stormwater reuse and recharge that demonstrate the runoff reduction and pollutant removal necessary to approximate pre-development conditions to the MEP and to protect water quality. The first inch of runoff must be addressed.*
3. *Incentives for Redeveloped Sites. When considered at the watershed scale, certain types of developed sites can either reduce existing impervious surfaces, or at least create less 'accessory' impervious surfaces. Small MS4s may develop a program to allow adjustments to the performance standard for new development or redevelopment sites that qualify.*
4. *Site plan review must specifically address how the project applicant meets the performance standards and how the project will ensure long-term maintenance.*
5. *Ensure the long-term maintenance of structural stormwater control measures installed.*
6. *Require that property owners or operators of any new development or redeveloped site subject to the performance standards provide verification of maintenance for the approved structural stormwater control measures used to comply with the performance standards.*
7. *Maintain an inventory of all post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites, including both public and private sector sites located within the permit area.*

8. *Conduct inspections of each project site covered under performance standards, at least one time during the permit term. Permittees must document and maintain records of inspection findings and enforcement actions and make them available for review by the permitting authority.*

7.2 Program Description

Post-construction stormwater management in areas undergoing new development or redevelopment is necessary because runoff from these areas has been shown to significantly affect receiving water bodies. Planning and design for the minimization of pollutants in post-construction stormwater discharges is the most cost-effective approach to stormwater quality management.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in stormwater runoff. As runoff flows over areas altered by development, it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients. These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams.

The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the water body during storms. Increased impervious surfaces interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include stream bank scouring and downstream flooding, which can lead to property damage.

The Town has developed and enforced a program to address stormwater runoff, in quality and quantity, from new development and redevelopment projects within the Town that disturb 5,000 square feet or greater, and projects less than 5,000 square feet that are part of a larger common plan of development or sale. As communities are developed, impervious surfaces replace natural topography, and stormwater peak flows and volume increase. In addition, increased urban areas add to pollutant loads in stormwater runoff. The purpose of this control measure is to minimize water quality impacts and attempt to maintain pre-development conditions. In addition, this aspect of the SWMP is intended to provide the Town with the necessary authority

to implement and enforce program elements which address post-construction runoff from new development or redevelopment projects.

7.3 BMPs

The program consists of four BMPs: the post construction stormwater quality ordinance, maintenance agreements, performance standards, and inspections.

7.3.1 BMP 5-1: Post Construction Stormwater Quality Ordinance

IMPLEMENTATION DETAILS

The Town has developed and implemented an ordinance that effectively controls runoff from new development or redevelopment construction sites. The ordinance includes guidelines for minimizing impervious areas, controlling pollutants by eliminating or reducing new sources and installing treatment (structural) control, as needed and appropriate to the site. In addition, it includes provisions for structural control ownership (privately owned/Town owned), maintenance responsibility, and subsequent enforcement of non-compliance. Post development peak discharge rates shall not exceed pre-development discharge rates for the two (2) and ten (10) year frequency twenty-four (24) hour duration storm events.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Develop site performance standards for new development/redevelopment construction activities and revise ordinance accordingly. (Year 1)

7.3.2 BMP 5-2: Maintenance Agreements

IMPLEMENTATION DETAILS

To ensure the long-term maintenance of structural stormwater control measures installed, the Town has been requiring developers to sign a maintenance agreement for structural controls according to DHEC standards. To obtain a Land Disturbance Permit, the developers must submit the maintenance agreements. The maintenance agreements need to be signed by both the developer/owner and the Town's Engineering Director, and witness and recorded in the York County Courthouse.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Maintain an inventory of all post-construction structural stormwater control measures installed and implemented at new development and redeveloped sites. (Years 1-5)
2. Continue to have developers sign maintenance agreements defining ownership and record in the County's court house. (Years 1-5)
3. Maintain Town-wide structural control inventory and conduct inspections to identify structures that will require maintenance at least once per permit cycle. (Years 1-5)
4. If responsibility of structural controls is up to private owners, develop schedule for owners to use and provide regular proof of maintenance for Town. (Years 1-5)

7.3.3 BMP 5-3: Performance Standards

IMPLEMENTATION DETAILS

The Town has established, implemented and enforced a requirement through the Ordinance that owners or operators of new development and redeveloped sites discharging to the MS4, which disturb greater than or equal to 5,000 square feet (including projects that disturb less than 5,000 square feet that are part of a LCP), design, install, implement, and maintain stormwater control measures that approximate pre-development conditions to the MEP and protect water quality. The revised Ordinance also requires that the first inch of rainfall being addressed.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Investigate the feasibility of developing an incentive program to allow adjustments to the performance standard for certain types of new development or redevelopment sites. (Years 1-5)
2. Through site plan review, specifically address how the project applicant meets the performance standards and how the project will ensure long-term maintenance. (Years 1-5)
3. Train site plan review staff on Low Impact Development (LID) technologies. (Years 1)
4. Establish a procedure to require that property owners or operators of any new development or redeveloped site subject to the performance standards provide verification of maintenance for the approved structural stormwater control measures used to comply with the performance standards. (Years 1-5)

7.3.4 BMP 5-4: Inspections

IMPLEMENTATION DETAILS

The Town has been conducting inspections of sites with post-construction stormwater runoff structural controls to verify and ensure the long-term maintenance of structural control measures installed. The Town has revised its Ordinance to require the first inch of rainfall to be addressed. The project sites covered under new performance standards will be inspected. The Town will develop detailed inspection procedures for sites required to address the first inch of rainfall to ensure that all stormwater control measured are operating correctly.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Conduct inspections of each project site covered under performance standards within 30 days of completion of the construction and at least once during the permit term. (Years 1-5)
2. Document and maintain records of inspection findings and enforcement actions and make them available for review by SCDHEC. (Years 1-5)
3. Develop detailed inspection procedures for sites required to address the first inch of rainfall to ensure that all stormwater control measured are operating correctly. (Year 1)

SECTION 8 MCM-6: Pollution Prevention/Good Housekeeping for Municipal Operations

8.1 Summary of Permit Requirements

1. *Update and maintain an inventory of municipally-owned and stormwater controls that are not covered under a separate general or individual NPDES permit (i.e. industrial, solid waste, etc.).*
2. *Include a list of industrial facilities you own or operate that are subject to SCDHEC NPDES General Permit for Stormwater Discharges Associated with Industrial Activity (SCR000000) or individual NPDES permits for discharges of stormwater associated with industrial activity that ultimately discharge to your Small MS4. Include the SCDHEC permit number or a copy of the Industrial NOI form for each facility.*
3. *Documentation - The list of municipally owned, or operated, facilities and stormwater controls must be maintained and available for review by the permitting authority.*
4. *Develop a comprehensive assessment of all municipally-owned or operated facilities identified at least once during the permit term and include it in the permit reapplication for their potential to discharge pollutants in stormwater.*
5. *Identify as "high-priority" those facilities that have a high potential to generate stormwater pollutants.*
6. *Document the results of the assessments and maintain copies of all site evaluation checklists used to conduct the comprehensive assessment. The documentation must include the results of the permittee's initial assessment, any identified deficiencies and corrective actions taken.*
7. *Starting no later than 24 months from the effective date of coverage and at least once per year thereafter, a comprehensive inspection of "high priority" facilities, including all stormwater controls, must be performed by the permittee.*
8. *The yearly inspection results must be documented and records maintained by the Small MS4. The inspection report must also include any identified deficiencies and the corrective actions taken to fix the deficiencies.*
9. *Assessment/prioritization of MS4 catch basins – Permittees must prioritize their owned and/or operated stormwater management systems / structures and implement a maintenance schedule.*

10. *Develop a set of pollution prevention measures that, when applied during municipal O&M activities, will reduce the discharge of pollutants in stormwater. Municipal operation and maintenance activities to be considered include but are not limited to pavement and rights-of-way maintenance, bridge maintenance, cold weather operations, and municipally sponsored events.*
11. *Inspect, and maintain, wherever and whenever necessary, all municipally-owned or maintained structural stormwater controls. The permittee must also maintain all municipally owned green infrastructure practices through regularly scheduled maintenance activities.*
12. *Develop an annual employee training program for appropriate employees involved in implementing pollution prevention and good housekeeping practices.*
13. *Identify and track all personnel requiring training and records must be maintained.*
14. *Contractors hired by permittees to perform municipal maintenance activities must be contractually required to comply with all of the Small MS4 stormwater control measures, good housekeeping practices, and facility-specific stormwater management procedures.*
15. *Provide oversight of contractor activities to ensure that contractors are using appropriate control measures and procedures.*
16. *Continue developing, implementing, and enforcing a program to reduce pollutants in any stormwater runoff to their regulated Small MS4 from construction activity.*

8.2 Program Description

The Town conducts several municipal operational and maintenance activities, some of which have the potential to result in discharges of pollutants in runoff or be sources of non-stormwater discharges. The Town has developed and implemented an operation and maintenance plan to help prevent and reduce pollutant runoff from municipal operations. These activities have been evaluated to identify those that could be significant sources of pollutants in runoff and develop appropriate measures to reduce the discharge of pollutants from these sources to the MEP. Staff from each facility or operation department was interviewed to ensure the practicality and effectiveness of the BMPs selected.

This program element will focus on Town operations and include provisions for employee training and review of municipal operations to help improve pollution prevention.

8.3 BMPs

The program consists of three BMPs: facility and operation pollution prevention, system inspection and maintenance and employee training.

8.3.1 BMP 6-1: Facility and Operation Pollution Prevention

IMPLEMENTATION DETAILS

The Town maintains a list of all its facilities and operations and has identified high priority facilities and operations. The only facility owned by the Town that has an industrial permit is the wastewater treatment plant. The SCDHEC permit number for the wastewater treatment plant is: SCR002810.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Maintain an inventory of municipally owned or operated facilities. Identify "high priority" facilitates. Evaluate all municipal facilities to ensure that adequate controls are in place to help ensure possible pollutant sources are contained (i.e., dikes, curbs, etc.). Perform annual inspections of "high priority" facilities. Maintain inspection and correction records. (Years 2-5)
2. Develop and distribute educational/informative materials (brochures, posters, etc.) to Town workplace areas which identify good housekeeping practices to help reduce common pollutant sources and discuss the impact of discharges to the environment. (Year 2)
3. Inspect and install adequate controls at municipal facilities to help ensure possible pollutant sources are contained (i.e., dikes, curbs, etc.). (Years 2-5)

8.3.2 BMP 6-2: System Inspection and Maintenance

IMPLEMENTATION DETAILS

The Town will hire a two-man crew to fulfill the system inspection and maintenance permit requirement.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Maintain a prioritized list of the Town owned and/or operated stormwater management systems / structures and implement a maintenance schedule. (Years 2-5)
2. Inspect and maintain, as necessary, all municipally-owned or maintained structural stormwater controls. (Years 2-5)

3. Increase street-sweeping frequency in areas most prone to litter and dust/dirt accumulation. (Years 2-5)

8.3.3 BMP 6-3: Employee Training

IMPLEMENTATION DETAILS

The Town's pollution prevention program cannot be successful without support and involvement from other departments. The Town will set up a training program to educate employees about stormwater management, potential sources of contaminants, and BMPs.

IMPLEMENTATION SCHEDULE AND MEASURABLE GOALS

1. Develop and implement a pollution prevention workshop for all municipal employees (grounds maintenance, landscaping crews, etc.). (Years 2 and 4)
2. Hold annual workshops for new employees and crew members. (Years 2-5)
3. Identify and track all personnel requiring training and maintain all records. (Years 2-5)
4. Modify contracts with outside contractors hired by the Town to perform municipal maintenance activities and require them to comply with all of the Small MS4 stormwater control measures, good housekeeping practices, and facility-specific stormwater management procedures. (Years 2-5)
5. Provide oversight of contractor activities to ensure that contractors are using appropriate control measures and procedures. (Years 2-5)

SECTION 9 TMDL MONITORING PROGRAM

9.1 Program Description

In accordance with the NPDES General Permit for Small MS4s, Section 3.2 Total Maximum Daily Load (TMDL) Monitoring and Assessment:

> *"For SMS4 discharges of the pollutant(s) of concern to TMDL waters, permittees shall identify discharges located in the TMDL watershed draining to the impaired WQMS. The SWMP shall include a TMDL Monitoring and Assessment Plan. The Monitoring and Assessment Plan component shall..... be completed and submitted to the SC DHEC Bureau of Water..... within 12 months of the effective date of permit coverage for existing TMDL."*
>
> .....
>
> *Permittees shall complete and submit TMDL Implementation Plans for approved TMDL within 48 months from the Effective Date of this permit.*

A TMDL was developed for Steele Creek and went into effect May 2007. At the time that the TMDL was written, three water quality monitoring stations on Steele Creek had been placed on the South Carolina 2006 §303(d) list of impaired waters for violations of the fecal coliform bacteria water quality standard. Fecal coliform bacteria is an indicator of possible contamination by fecal matter and are thus a public health concern due to the potential for exposure to pathogens through contract recreation.

In anticipation of the new permit requirement for TMDL monitoring, the Town retained AMEC Environment and Infrastructure, Inc., an environmental consulting firm, in October 2013 to develop a Monitoring and Assessment Plan for Steele Creek. The plan is currently under development and will be submitted to SCDHEC for review no later than December 31, 2014.

The Monitoring and Assessment Plan will direct field sampling in order to determine bacteria loading from the Town of Fort Mill's MS4. Monitoring data collected in accordance with this Monitoring and Assessment Plan will provide insight into potential sources of bacteria and

provide data for development of a TMDL Implementation Plan which is a Year 4 requirement of the 2014 NPDES Small MS4 General Permit.

9.2 BMPs

This program will be implemented based on the following schedule and measurable goals:

1. Develop the Monitoring and Assessment Plan for Steele Creek. (Year 1)
2. Conduct sampling by following the field and sampling protocols depicted in the monitoring plan. (Years 2-3)
3. Assess the monitoring data to prioritize areas of the Town's MS4 that will be targeted or implementation of BMP. (Year 4)
4. Develop a schedule for selection of appropriate BMP that will implement the Waste Allocation to the MEP. (Year 4)
5. Implement those elements of the TMDL Implementation Plan that are scheduled to occur within the term of this permit. (Years 4-5)
6. Update the TMDL Monitoring and Assessment Plan to be submitted in each Annual Report. Document the progress on the TMDL Implementation and Analysis in the Annual Report (Years 3 and 5)

SECTION 10 REPORTING AND EVALUATION OF STORMWATER MANAGEMENT PLAN

The Town of Fort Mill's SWMP is intended to be flexible and constantly evolving. As such, evaluations will be performed to help ensure that the plan is effective and meeting its intended goals. Evaluating the program should allow the program to adapt to new information, new problems, new BMPs, changing circumstances and provide the Town the opportunity to gather information for submittal to SCDHEC.

NPDES Phase II municipalities were required to submit Annual Reports to SCDHEC during the first five (5) year permit period. The second permit requires reduced frequency of reporting to SCDHEC. The Annual Reports to SCDHEC define the plans progress relative to the measurable goals included for each control measure. Programs, which met their defined measurable goals, are considered to be improving water quality to the maximum extent possible. The Annual Report will include information on the steps taken each year to implement the SWMP and include the following information in accordance with Section 122.34(g)(3) of SC Regulation 61-9:

(i) The status of compliance with permit conditions, an assessment of the appropriateness of the identified best management practices and progress towards achieving the identified measurable goals for each of the minimum control measures. Specific information on the tasks performed during each reporting period will be included. This will include information such as inspection reports, enforcement actions, ordinances developed, etc. Information will be included which may in some instances define the number of items completed (miles of streams cleaned, number of storm drains stenciled, etc.) or when a task is performed (date an inspection of a certain detention pond is performed);

(ii) Results of information are collected and analyzed, including monitoring data, if any, during the reporting period;

(iii) A summary of the stormwater activities the Town plans to undertake during the next reporting cycle;

(iv) Changes in any identified best management practices or measurable goals for any of the minimum control measures; and

(v) Notification that the Town will rely on another government entity to satisfy some of their permit obligations (if applicable).

APPENDIX

Appendix A
Implementation and Enforcement Certification

WILLIAM B. MACK (1903-1986)
B. BAYLES MACK
BARRON B. MACK, JR.

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June 6, 2014

TO WHOM IT MAY CONCERN:

RE: CERTIFICATIONS RELATED TO SWMP FOR THE TOWN OF FORT MILL

As Attorney for the Town of Fort Mill, I have reviewed the SWMP documents and certify the following:

1. There are certain departments with the jurisdiction of the Town of Fort Mill that will be responsible for storm-water related activities. Those departments are identified below along with the storm-water activities for which they will be responsible:

   a. Stormwater Department (management, reporting and enforcement) - Contact: Zhengzheng Wiley, Stormwater Manager. 803-322-2697
   b. Police Department (spills) – Contact: Jeffrey Helms, Police Chief, 803-547-2022
   c. Fire Department (spills) – Contact: Jeffrey Hooper, Fire Chief, 803-547-5511
   d. Public Works Department (leaf and street cleaning) – Contact: David Broom, Public Works Director, 803-547-7158
   e. Sewer Department (oversight and plan review) – Contact: Ben Wright, Sewer Maintenance Supervisor, 803-487-2366
   f. Water and Sewer Administration (oversight and plan review) – Contact: David Broom, Public Works Director, 803-547-7158

2. The SWMP is administered and enforced pursuant to the terms of the enabling ordinance entitled Stormwater Management and Sediment Control Ordinance of the Town of Fort Mill, South Carolina which contains compliance procedures. Those procedures include provisions related to corrective measures, stop work orders, civil penalties, the rights of the Town to seek injunctive relief and permit suspension/revocation.

3. Implementation of the storm-water ordinances are controlled by Section 3.6 of the enabling ordinance which includes provisions for pre-construction conferences, inspections, maintenance and the issuance of performance bonds. Section 6.1 of the enabling ordinance provides for appeals and variances of any decision made by the Town's Stormwater Manager.

4. Under the enabling ordinance, the Town's Stormwater Manager may issue stop work orders and may suspend permits for violations of the ordinance, however, any temporary or permanent injunctive relief to enjoin continuing violations must be sought through petition of the circuit court.

At this point it appears the Town of Fort Mill has all of the requisite legal authority to implement the Stormwater Management Program as described in the enabling ordinance. If it becomes evident during implementation that the Town lacks the requisite legal authority, then in that event the Town will be advised of the necessary steps to become legally compliant, in which case this opinion will be amended or modified.

Should there be any questions in this regard, please don't hesitate to contact me.

Sincerely,

MACK & MACK

Barron B. Mack, Jr.

Appendix B
Fort Mill Storm Sewer Map

Appendix C Illicit Discharge Detection and Elimination Procedure Manual

TOWN OF FORT MILL

ILLICIT DISCHARGE DETECTION AND ELIMINATION PROCEDURES MANUAL

FEBRUARY 2009

Introduction

The Town of Fort Mill's Illicit Discharge Detection and Elimination Program has been developed in accordance with the South Carolina Department of Health and Environmental Control Storm Water Compliance rules and regulations to ensure storm water quality controls are conducted and evaluated and that the Program is effective in detecting and eliminating discharges of pollutants in the storm drainage system from illicit connections, spills and illegal dumping.

I. Program Development

1. Implement the Illicit Discharge Detection and Elimination Program.

2. Review the Program annually and update as needed, submit any changes to the Program to the SCDHEC Storm Water Compliance Manager.

3. Select a Program Coordinator and appropriate personnel to take primary responsibility for the Program, including coordinating with municipal maintenance staff and inspectors, training on illicit discharge control activities, assuring that the necessary illicit discharge(s) are eliminated and cleanup is conducted, and assuring that NPDES permit reporting relating to illicit discharges is completed by established due dates.

4. Conduct annual training for Town inspectors and field staff as it relates to the Program's procedures and performance standards.

5. Update the Town's storm drain system and outfall maps as new information is collected, and whenever possible, identify on the maps new storm water facilities within a year of their construction.

II. Dry Weather Flow Field Survey

1. Conduct dry weather flow field survey by walking the outfalls to identify and monitor dry weather flows and other potential illicit discharges. The survey is to be conducted during dry weather, after run-off from a rainfall has ceased and enough time has elapsed to ensure only dry weather flows are documented.

2. Color code map(s) to indicate flow/no flow, document physical characteristics of the dry weather flow on the Field Investigation Sheet, conduct field analysis on each flow and document on the **Field Investigation Sheet** in the **Field Analysis** section and, if necessary, collect samples for laboratory analysis.

3. Return documentation to the Program Coordinator for review to determine high priority locations and what action to take if an illicit discharge is detected.

4. If an illicit discharge is detected or a citizen reports illegal dumping, a field investigation should be conducted to determine the source of the illicit discharge and to identify the responsible party.

III. Field Investigations

1. Field investigations are to be conducted when an illicit discharge has been detected as a result of the Dry Weather Flow Survey, or when a citizen reports illegal dumping into the system. If an illicit discharge is detected at the outfall, the investigator(s) must locate the source of the pollutant(s) to determine what action is necessary to eliminate the discharge and to identify the responsible party. To locate the source, take the information documented on the **Field Investigation Sheet** and start walking from the outfall to the first upstream storm sewer manhole, collect and analyze sample(s) and document results. Continue moving upstream and sampling the flow at each manhole until the sampling results indicate the flow is not polluted. Begin televising the storm sewer from the "non-polluted" manhole downstream toward the outfall; document any connection(s) and the measurement from the "non-polluted" manhole. Upon confirmation of the location of the illicit connection, notification (NOV) must be made to the responsible party so the necessary repairs can be made. If any flow is observed after the repairs have been performed, the continuing flow should be sampled to verify the pollution source was eliminated and that there are no additional problems impacting the same storm sewer line. Retain any and all videos from line televising.

IV. Follow-up And Enforcement

The Program Coordinator and/or designated staff are to perform follow-up inspections and verbally respond to public complaints as soon as possible and no later than 72 hours after receipt of original call. Inspections and follow-up are to continue until compliance is achieved.

Upon issuance of the Notice Of Violation (NOV), the following enforcement actions should be implemented to ensure compliance.

Step 1: Verbal Warning to Responsible Party

Meet with responsible party to review documented investigation results and establish a timeline for eliminating the illicit discharge. If uncorrected within thirty (30) days without a reasonable explanation, proceed to Step 2. Document date and time of the meeting, have responsible party sign two (2) copies of the NOV, leave one with responsible party and keep one on file.

Step 2: Written Warning to Responsible Party

Meet with responsible party and issue second NOV, request written response within seven (7) days of receipt and allow fifteen (15) days to correct. If corrected, note and initial NOV and place in file. If uncorrected without a reasonable explanation, proceed to Step 3.

Step 3: 2nd Written Warning to Responsible Party

Meet with responsible party and re-issue NOV, request written response within seven (7) days of receipt and allow fifteen (15) days to correct. If corrected, note and initial NOV and place in file. If uncorrected without a reasonable explanation, proceed to Step 4.

Step 4: Written Letter To Responsible Party Indicating Fines and Court Date

If the illicit discharge or connection is eliminated and necessary repairs made prior to court date, fines are reduced fifty (50) percent. Fines are $100.00 per day beginning from the date of issue of the second NOV. Days will be counted as business days. Pull file and all documentation and prepare a summary and timeline of events leading to the trial.

V. Illicit Discharge Spill Control

Spills and container leaks constitute an illicit discharge and should be managed in a way that prohibits the discharge from entering into the storm sewer. Hazardous material spills and container leaks are to be managed and controlled by the Fort Mill Fire Department. The FMFD will be the "first responders" and are trained to contain and control spills and container leaks to ensure the discharge does not flow into the storm sewer system. This can be achieved by techniques such as diking, damming, absorbent pads, diversion and patching the leak as discussed in the Hazardous Materials Standard Operating Guidelines manual. Communication between the FMFD and the Program Coordinator or designated representative is essential in the event of a spill or leak; therefore, a communication network should be established and implemented. The Program Coordinator should be alerted to the situation as soon as the FMFD determines feasible (i.e. the public health is not threatened, the public health is not impacted, the area is safe to enter) and the Program Coordinator should document the event for reporting purposes and to initiate follow-up activities for the storm sewer in the affected area as well as the corresponding outfall.

VI. Reporting

A summary of illicit discharge investigations and elimination activities should be submitted as part of the **Annual Report** and should include, at a minimum, the following:

- The number of illicit discharges, enforcement and clean-up actions
- The pollutant source(s) of each illicit discharge (if it can be identified)
- The number of illicit discharges where the responsible party was identified and the number of illicit discharges where the responsible party was not identified
- The number of illicit discharges eliminated
- The number of illicit discharges not eliminated

To aid the Program Coordinator or designated representative in preparing the **Annual Report**, a database should be developed and maintained for tracking and reporting of illicit discharge control activities.

Appendix D
NPDES Phase II Permitting Requirements

In accordance with the 1999 Federal Phase II Stormwater regulations, the Town of Fort Mill is hereby applying for coverage for a small municipal separate storm sewer system (MS4) National Pollutant Discharge Elimination System (NPDES) permit. The information provided below is in response to the requirements in Section 122.21(f) of SC Regulation 61-9:

(1) The activities conducted by the applicant which require it to obtain an NPDES permit.
Stormwater discharges.

(2) Name, mailing address, and location of the facility for which the application is submitted.
Town of Fort Mill
P.O. Box 159
Fort Mill, SC 29715

(3) Up to four SIC codes which best reflect the principle products or services provided by the facility.
9999 – Unclassified

(4) The operator's name, address, telephone number, ownership status, and status as Federal, private, public or other entity.
Mr. Dennis Pieper
Town Manager, Town of Fort Mill
P.O. Box 159
Fort Mill, SC 29715
(803) 547-2116

(5) Whether the facility is located on Indian Lands.
No.

(6) A listing of all permits or construction approvals received or applied for under any of the following programs:
(iii) NPDES programs under CWA
Fort Mill Wastewater Treatment Plant – SC0020371
General Permit at WWTP for Pollution Prevention Plan – SCR002810

(7) Per Section 122.33(b)(2)(i) of SC Regulation 61-9, "a storm sewer system map, showing the location of all outfalls and the names and locations of all waters of the United States that receive discharges from the outfalls", instead of the map described in Section 122.21 (f)(7) of SC Regulation 61-9.
Completed and forwarded to SCDHEC in June 2003.

(8) A brief description of the nature of the business, activity, or type project.
The Town of Fort Mill is a municipality conducting municipal business on behalf of the citizens of Fort Mill, South Carolina.